WHAT IS CLAIMED IS:

1. A method of preparing a *Tricholoma matsutake*-infected young pine tree, comprising the steps of:

inoculating fungal mycelia obtained by pulverizing *T. matsutake* fruit bodies liquid-cultured in PDB medium into the bottom of a sterilized culture container at an amount of 0.01-0.02 mg dry weight/mL sterile water;

mixing perlite and sphagnum peatmoss at a ratio of 80:1-2, and placing the resulting mixed soil onto the inoculated fungal mycelia;

preparing K-liquid medium containing 1.65 g of NH_4NO_3, 0.2 g of KNO_3, 0.002 g of $CaCl_2 \cdot 2H_2O$, 0.02 g of KCI, 0.2 g of KH_2PO_4, 0.9 g of $MgSO_4 \cdot 7H_2O$, 0.2 g of $(NH_4)_2HPO_4$, 0.5 g of NH_4-Tar, 0.5 ml of Fe-Cit, 0.031 g of H_3BO_3, 0.01516 g of $MnSO_3 \cdot 4H_2O$, 0.0086 g of $ZnSO_4 \cdot 7H_2O$, 0.00083 g of KI, 0.00025 g of $Na_2MoO_4 \cdot 2H_2O$, 100 μg of Thiamine HCl, 1.0 g of malt extract, 0.5 g of yeast extract, 0.3 g of casein and 3.0 g of glucose per 1 L in water, adjusting pH of the medium to pH 5.5-5.6, and aliquotting the K-liquid medium onto the mixed soil;

aseptically germinating pine seeds up to 3 cm in length, planting the resulting aseptic seedlings into infection medium containing the mixed soil and the K-liquid medium, and covering the culture container with a lid; and

coculturing the pine seedling and the *T. matsutake* mycelia at 15-25°C for 24 hrs under 10-40,000 lux light intensity.

2. The method as set forth in claim 1, prior to the step

of inoculating the fungal mycelia obtained by pulverizing *T. matsutake* fruit bodies liquid-cultured in PDB medium into the bottom of the sterilized culture container, further comprising the step of preparing K-solid medium containing 1.65 g of NH_4NO_3, 0.2 g of KNO_3, 0.002 g of $CaCl_2 \cdot 2H_2O$, 0.02 g of KCI, 0.2 g of KH_2PO_4, 0.9 g of $MgSO_4 \cdot 7H_2O$, 0.2 g of $(NH_4)_2HPO_4$, 0.5 g of NH_4-Tar, 0.5 ml of Fe-Cit, 0.031 g of H_3BO_3, 0.01516 g of $MnSO_3 \cdot 4H_2O$, 0.0086 g of $ZnSO_4 \cdot 7H_2O$, 0.00083 g of KI, 0.00025 g of $Na_2MoO_4 \cdot 2H_2O$, 100 μg of Thiamine HCl, 1.0 g of malt extract, 0.5 g of yeast extract, 0.3 g of casein, 10.0 g of glucose and 2.0 g of phytagel per 1 L in distilled water, adjusting pH of the K-solid medium to pH 5.5-5.6, and aliquotting the K-solid medium into the culture container.

3. The method as set forth in claim 1, wherein a paper cup is tightly inserted into the culture vessel.

4. The method as set forth in claim 2, wherein the K-solid medium is aliquotted onto the bottom of the culture container at a thickness of 0.5 mm to 2 cm.

5. A *Tricholoma matsutake*-infected young pine tree, prepared by a process comprising the steps of:

inoculating fungal mycelia obtained by pulverizing *T. matsutake* fruit bodies liquid-cultured in PDB medium into the bottom of a sterilized culture container at an amount of 0.01-0.02 mg dry weight/mL sterile water;

mixing perlite and sphagnum peatmoss at a ratio of 80:1-2, and placing the resulting mixed soil onto the inoculated fungal

mycelia;

preparing K-liquid medium containing 1.65 g of NH_4NO_3, 0.2 g of KNO_3, 0.002 g of $CaCl_2 \cdot 2H_2O$, 0.02 g of KCI, 0.2 g of KH_2PO_4, 0.9 g of $MgSO_4 \cdot 7H_2O$, 0.2 g of $(NH_4)_2HPO_4$, 0.5 g of NH_4-Tar, 0.5 ml of Fe-Cit, 0.031 g of H_3BO_3, 0.01516 g of $MnSO_3 \cdot 4H_2O$, 0.0086 g of $ZnSO_4 \cdot 7H_2O$, 0.00083 g of KI, 0.00025 g of $Na_2MoO_4 \cdot 2H_2O$, 100 μg of Thiamine HCl, 1.0 g of malt extract, 0.5 g of yeast extract, 0.3 g of casein and 3.0 g of glucose per 1 L in water, adjusting pH of the medium to pH 5.5-5.6, and aliquotting the K-liquid medium onto the mixed soil;

aseptically germinating pine seeds up to 3 cm in length, planting the resulting aseptic seedlings into infection medium containing the mixed soil and the K-liquid medium, and covering the culture container with a lid; and

coculturing the pine seedling and the *T. matsutake* mycelia at 15-25°C for 24 hrs under 10-40,000 lux light intensity.